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ABSTRACT

The McLennan Community College Multi-County Needs Assessment Project's (MAP) survey to identify employer needs is discussed in the document. The Business and Industry Survey, one component of MAP, was conducted in the central Texas area (Bosque, Falls, Hill, and McLennan counties) during 1974-1975. Survey development and procedures for its implementation are discussed, including objectives, data preparation, supervision, administration, and data processing. Interviewers were selected from those who had conducted the Needs Assessment Survey, with training and supervision provided. A total of 127 businesses and agencies responded to the questionnaire; a random sampling technique was not employed. Questions covering general information, employee information, entrance requirements, problems, and supportive education programs were asked. Analysis of findings is presented, with 10 charts supplementing the discussion. A listing of the various businesses, industries, and agencies contacted; the questionnaire; code manual; tabulated responses to the questionainaire; and a listing of local job openings current as of January 1975 are appended. Information and data gained will be used to establish resource files for local curriculum planning, enabling school counselors, local educators, and manpower planners to concentrate on developing skill training areas specified as necessary by local businesses and agencies. (LH)

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THE ASSESSMENT OF BUSINESS AND INDUSTRY NEEDS

PHASE II

OF

MULTI-COUNTY ASSESSMENT OF ADULT NEEDS PROJECT (MAP)

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WACO, TEXAS

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PROJECT OVERVIEW

The U.S. Department of Health, Education, and Welfare, Office of Education (Adult Education), contracted with McLennan Community College Multi-County Needs Assessment Project (MAP) to design and initiate a survey to assess the felt and perceived needs and interest of the local population and the business community at the grass roots level relative to education and training.

The survey was developed and implemented in the four-county area (Bosque, Falls, Hill and McLennan Counties) surrounding Waco, Texas.

The Multi-County Needs Assessment Project (MAP) was directed toward the following goals:

A. A survey designed to solicit the opinions of the adult population relative to their educational and training needs and the obstacles that they perceive in meeting their needs and interest.

B. An analysis of the education and training needs of business and industry and other agencies.

C. Creation of an inventory of the extant adult education and training programs located within the four-county area.

D. Building a model adult education cooperative based upon the body of information gathered and having the capability of designing educational and career development programs and new delivery systems to meet the needs of adults.

A series of related reports has been prepared to describe the survey system and the results. The report series is made up of the following three volumes:

Volume 1. The Assessment of Adult Needs
Volume 2. The Business and Industry Survey
Volume 3. Summarized Highlights of the Findings in Volumes 1 and 2

The report in its entirety is intended to benefit other community areas in that they may transfer concepts developed during this project. Volumes 1 and 2 present the necessary steps for the conduct of this survey or its components in other communities. Volume 3 presents the highlights of the findings within the four-county Central Texas area surrounding Waco, Texas, that will be useful to many types of agencies in this geographical area and may be translatable and of utility to agencies in other geographic regions.

Goal C was deleted after a great quantity of data was gathered. The staff felt that such a publication would be outdated very quickly and hence not worth the concomitant expenditure of funds and manhours.

Goal D was predicated upon the effecting of a second year of project funding and did not become a reality during the project although this project has contributed materially toward this goal and the goal is being viably pursued by other means.

INTRODUCTION

The Business and Industry Survey is one component of the Multi-County Education Needs Assessment Project (MAP), a one-year project conducted within the Adult Education Cooperative area served by McLennan Community College. MAP has developed a survey instrument to identify employer needs in this four-county area. The survey instrument was used in 127 interviews with business and agency executives from widely differing business, manufacturing, and human service concerns. Information and data from these interviews will be used to establish resource files for local curriculum planning.

Purposes of this Report

This report has two major purposes:

1. To systematically analyze the employee-skill needs of the business, industries, and agencies in the local area.
2. To relate the information to local educators so that their curriculum would reflect courses designed to assure career opportunities and progression.

The reader will gain a better perspective of the role of the Business and Industry Survey in the MAP Project by reading the other reports in this undertaking. The Adult Education Needs Survey is described in Volume 1.

I BACKGROUND AND PROCEDURES

The Business Survey

Volume I of this series describes the survey of the felt and perceived educational needs of adults and its application in the MCC Adult Education Cooperative area which consists of four component counties -- Bosque, Falls, Hill and McLennan.

As a part of the Multi-County Assessment Project (MAP), the major function of the Business and Industry Survey is to provide service resource information. Information must be available that enables planning by educators, counselors, and manpower agents which reflects the latest job-skill information. Plans exist in the four-county Coop area for using the data obtained in the survey for three purposes:

1. To compile reports for local educators and school administrators which point out skill training areas specified as necessary by business and agency concerns.
2. To compile reports for manpower agents so that planning efforts will be concentrated in specified skill training areas.
3. To outline the most-wanted skill area for local jobs, making counselors more knowledgeable when consulting with students about careers.

The Design and Implementation of the Business and Industry Survey Instrument

As previously mentioned, the primary users of information produced by the Business and Industry Survey are local educators,

manpower planners, and school counselors. In this section we discuss the design requirements which guided both the construction of the survey instrument and the subsequent use of the instrument in the business, industry, and agency survey process in Bosque, Falls, Hill and McLennan counties.

Coding procedures followed in readying the survey data for use are also presented in the section of this report on Data Preparation.

Survey Design

The actual development of the business and agency survey instrument was the result of several months of concentrated effort by the MAP staff. Experts in various educational and manpower areas reviewed preliminary drafts of the survey instrument, and modifications of the instrument were based upon these reviews and a limited pre-test. Implementation of the survey was facilitated through the efforts of the chambers of commerce, independent school districts, and service agencies. The administrators of McLennan Community College formally introduced the survey to businesses and agencies via letter and thereby helped to secure the cooperation and commitment of executives and administrators in the survey process.

Design and Consideration

The survey instrument consists of questions to obtain data in each of the following categories:

1. General Information -- includes basic information about the business or organization such as name, address, telephone, contact persons, accessibility by public transportation, and classification.

2. Employee Information -- includes number of full and part-time employees, sex preferred, desirable education level, approximate starting salary.

3. Entrance Requirements -- contains information on age and educational prerequisites and necessity of previous job experience.

4. Problems -- includes information on typical hiring problems and skill-training needs of new employees.

5. Supportive Educational Programs -- includes programs mentioned by employers as necessary or helpful to success of business or agency.

Project Objective

Specifications in the MAP grant and discussions with educators and manpower planners provided the basis for the five objectives of the survey.

1. Determine the impact of educational and training programs on hiring policies for entry-level jobs.

2. Obtain statistics on numbers and types of entry level jobs.

3. Document whether educational and training programs are perceived to be adequate for entry-level positions.

4. Determine the expected increase or decrease in industrial and/or vocational-type jobs.

5. Explore what employers perceive as the most important and desired characteristics in new employees.

The utility of the survey for it's users should be based upon how well the questions elicited responses to meet the above objectives. The survey instrument developed and implemented in this project is an innovative tool and has proved effective in generating information to satisfy its intended purposes. The reader will note that the questionnaire was not precoded, necessitating a transfer of information to code sheets. The diversity of information received was far greater than if a closed questionnaire had been used. The questionnaire and code manual are contained in the Appendices.

Data Preparation

When completed, the coding sheets were used for one major purpose. Survey information needed to construct a planning data base and planning report was keypunched from the code sheets. Bulky information was not disregarded but recorded separately and is interspersed throughout the data analysis. The organization of the survey data for analysis including transfer to the coding sheets involved a tedious but relatively uncomplicated process.

Because employers were allowed to supply their own answers to seventy percent of the questions, a code manual that would be applicable to every answer was necessary. The manual was finalized after a brief inspection of replies to various questions. It was at this time that the staff determined the utility of employing a range for several questions which allows for more flexibility while including every response.

Each questionnaire was numbered, and for the staff's purpose, this number supplied the respondent's identification on the IBM card. After the ID was keypunched into the first three columns on the IBM card, the next two columns code the city and county where the interview was conducted. The remainder of the columns, six through seventy-two, record the coded survey data.

Survey Implementation

Securing the commitment of businessmen and administrators to participate in the survey was facilitated by the efforts of several organizations in the counties of Bosque, Falls, Hill and McLennan, who were in agreement on the need for such a survey.

A major decision of the MAP staff was whether or not to limit the survey to a specific number. A random sampling technique was possible in the Waco metropolitan area, but the same technique in the rural counties would have been untenable. Therefore, an arbitrary cut-off of a minimum of fifty employees for every business in the four-county area was selected. The 1974 Directory of Texas Manufacturers[1] was used as the basis for selection of local industries to be interviewed. The Directory classifies industries according to size by county or metropolitan area. All industries coded as four (at least fifty employees) or greater were selected.

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[1]The 1974 Directory is the twenty-fifth edition published by the Bureau of Business Research of the University of Texas at Austin. In the process of developing the entries, each manufacturer in the State was contacted from a list provided by city and regional chambers of commerce. Replies were received at UT from seventy percent of the manufacturers.

Size was not a consideration in selecting local agencies. The Waco Chamber of Commerce list was cross-checked with a listing of agencies in the four counties found in two Heart-of-Texas Council of Governments publications -- Regional Directory and A Link to the Outside World: A Regional Directory of Services for the Aged.

As a result of these qualifications, 142 businesses and agencies were selected. A total of 127 were actually used in the analysis. The missing interviews represent those employers who for their own reasons refused to participate and those businesses which had closed in the past year.

It must be noted here that because the survey did not employ a random sampling technique or interview the total population of businesses, industries and agencies in the four counties, statistical accuracy cannot be computed. Although validity can be questioned, the reader must keep in mind the survey's intent: to obtain general information for planning purposes. An assumption of the survey is that larger employers could provide the information trends.

Securing Interviewers

Survey interviewers were selected from men and women who conducted the Needs Assessment Survey in November. It was decided that seven interviewers could comfortably complete their assigned interviews in a two-week period because the interviewees were executives who in their business and agency settings operate from eight to five.

Training Interviewers

Because the survey instrument is highly structured, an extensive training session was not required. Also, the interviewers had each completed a two-day workshop in preparation for the previous survey.

The MAP staff did conduct a day long training session to acquaint interviewers with the differences between the two questionnaires (Adult Needs Assessment and Business and Industry) and the method for contacting executives and making appointments. As before, heavy emphasis was placed on role playing as a training method. Two staff members participated in the first role-playing interview, one playing the part of an executive.

Interviewer trainees observed and recorded responses of the executive. The exercise was frequently interrupted to instruct interviewers on the rationale for various questions and procedures.

The training process continued after the beginning of the survey. Careful review of initial recording forms provided the basis for feedback to interviewers so that procedural errors could be corrected.

Supervision and Administration

MAP staff provided supervision and management of the survey. These activities included assigning surveyors to industries and agencies, onsite checks, and telephone contacts with executives who had questions or reservations about the survey.

Data Processing

Electronic data processing was used in analyzing business, industry, and agency survey data. Only minimal data processing and programming costs were incurred since an already developed package of programs was readily available. Needed frequency counts and histograms were readily obtained.

Programs used are contained in the "Statistical Package for the Social Sciences (SPSS)." SPSS provides for preparation and editing of data, as well as descriptive and analytical statistical analysis. Commands to the SPSS system were well documented in a user's manual and the system allows for different analyses (done sequentially) on a single data file.

II ANALYSIS

The following are factual statements about findings from the survey of industries and agencies. No attempt was made in the planning phase to make the survey comparative to previous industrial surveys in the area; the purpose was different from other research because the survey sought information for educational planning. Original data in chart form is provided in the Appendices for the reader's information and interpretation.

A total of 127 executives and administrators responded to the questionnaire. According to the following chart, the two categories of manufacturing groups and wholesale and retail trade accounted for the majority of respondents.[2] These three categories were evenly distributed through the urban and rural areas; therefore no bias should be created between rural and urban responses.

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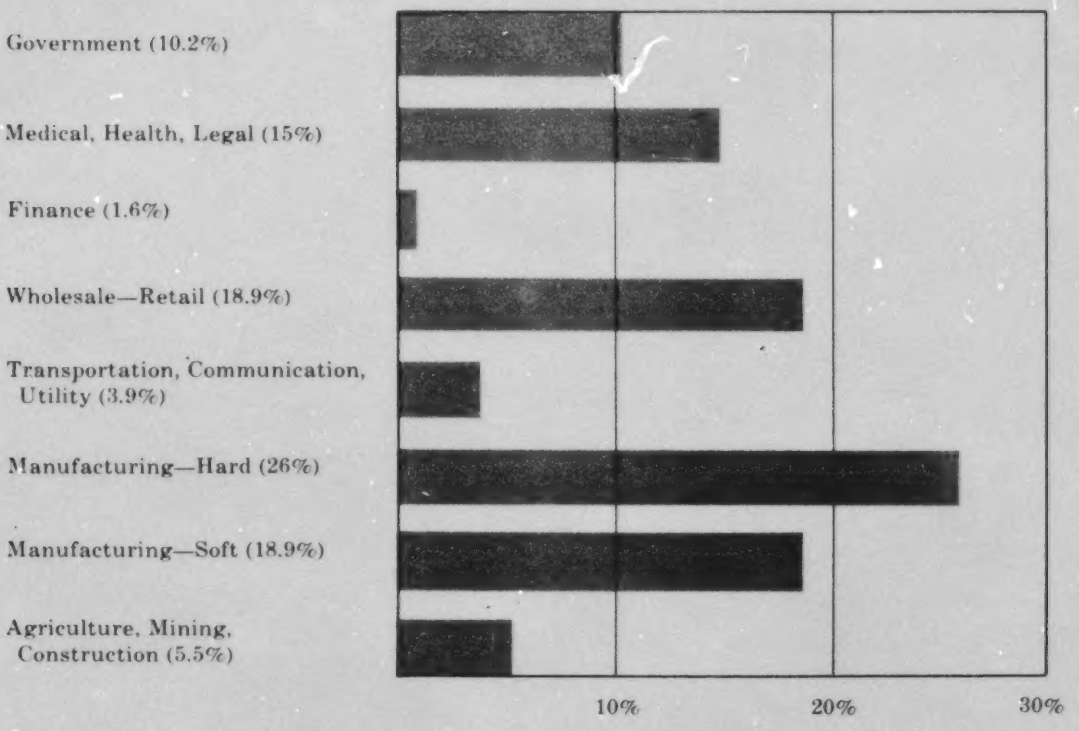
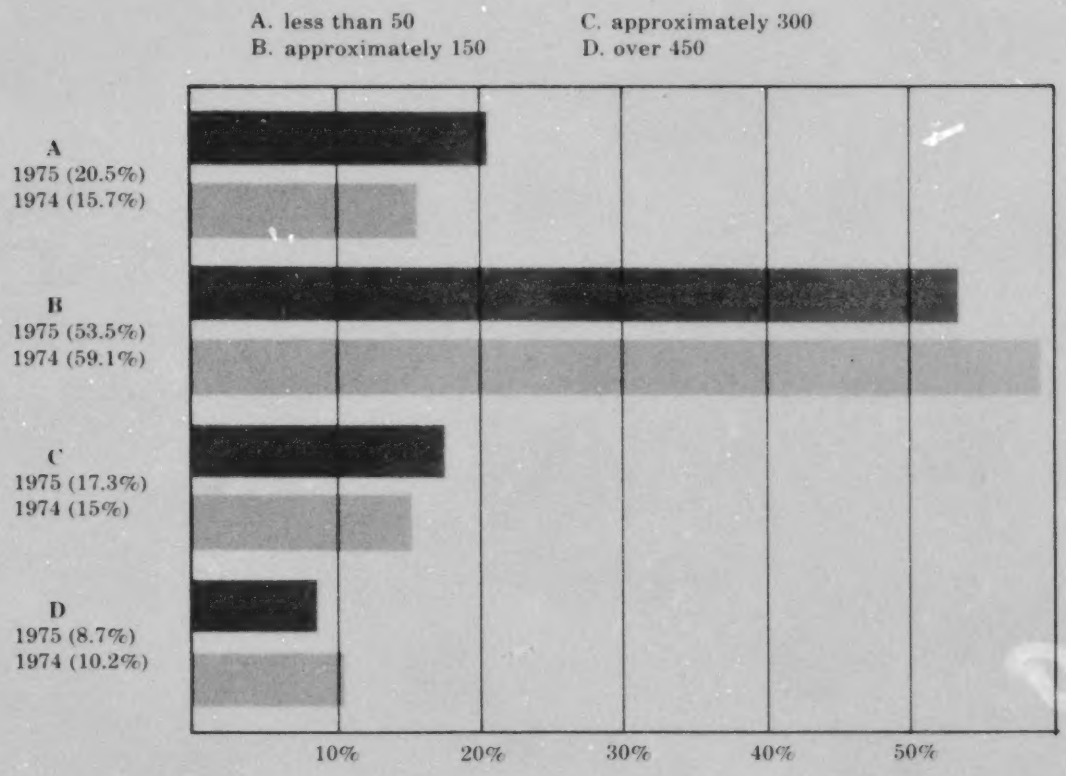
[2]Sixty-six percent of the urban and fifty-two of the rural businesses are engaged in hard or soft manufacturing and wholesale and retail trade.

CHART I
Manufacturing Product/Service Provided



It was decided to use the standard classification, used here by the chambers of commerce, to group agencies and industries by size. Based upon approximations, the classification scheme allows for a manageable reference of full-time employees. Although a cut-off point of at least 50 employees had been specified, interviewers in the field found that the Directory's coding system was sometimes in error. The staff decided to interview all predetermined businesses and agencies, regardless of current size.

CHART II
Comparison of Full-Time Employees 1974 and 1975

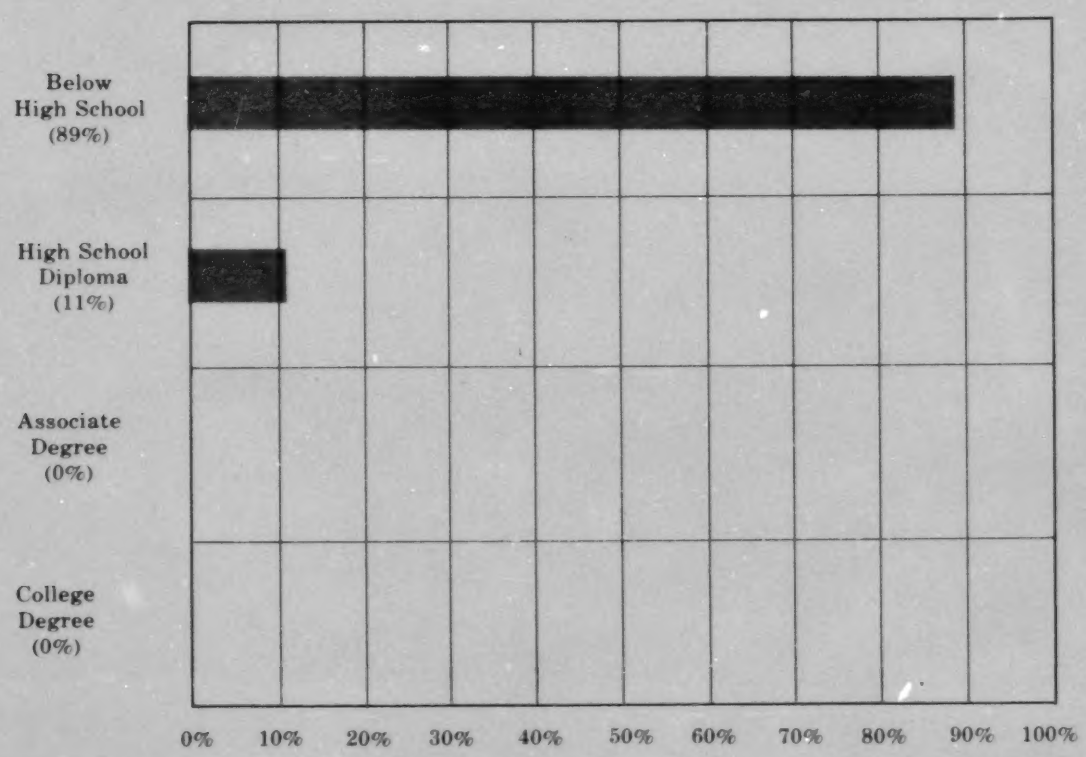


Over the year in question, 1974-75, the category of businesses and agencies with fewer than 50 employees and those with approximately 300 employees witnessed an increase. Meanwhile, the categories of "approximately 150" and "over 450" saw a decline. The movements seems to be a general decrease in overall employees by agencies and industry. (Businesses which closed in 1974 and 1975 were excluded from this analysis.) Sixty-eight percent of respondents employ part-time workers; thirty-two percent do not have part-time help on their payrolls.

Responses to minimum hiring age ranged from 16 to 25 years of age. Sixteen and seventeen were mentioned 53 times, while eighteen was the minimum hiring age 68 times. This question is of particular interest to educators because 41.7% of employers hire school-age children. An age range of nineteen to twenty-five was indicated by 4.7% of employers.

When questioned about hiring practices, 94.5% of those interviewed indicated that they hired both males and females. The remaining 5.5%, those hiring either males or females exclusively, were in the manufacturing category.

CHART III
Minimum Educational Level



According to the preceding chart, a majority of employers, 88.2%, indicated that they currently hire new employees without a high school diploma or equivalent. Only 11% set a high school diploma as an educational requisite for employment with their firm. A classification breakdown follows for those firms and agencies in this survey who stated they did not require a high school diploma for various entry level positions.

Agriculture, Mining, Construction	86%
Manufacturing, Soft	100%
Manufacturing, Hard	94%
Transportation, Communication, Utilities	80%
Wholesale and Retail Trade	96%
Finance	0%
Medical, Health, Education, Legal	68%
Government	84%

Employers were given the opportunity to express a desirable educational level for new employees. Because many businesses and agencies have various employment entrance levels, interviewees could select several educational levels as desirable.[3] The Appendices display the groupings mentioned and the following is a rank order, in the number of items specified, that an educational level was mentioned whether alone or in conjunction with at lease one other level.

High School Graduate	108
College Graduate (4 year)	23
Less than High School Graduate	16
Associate Degree	15

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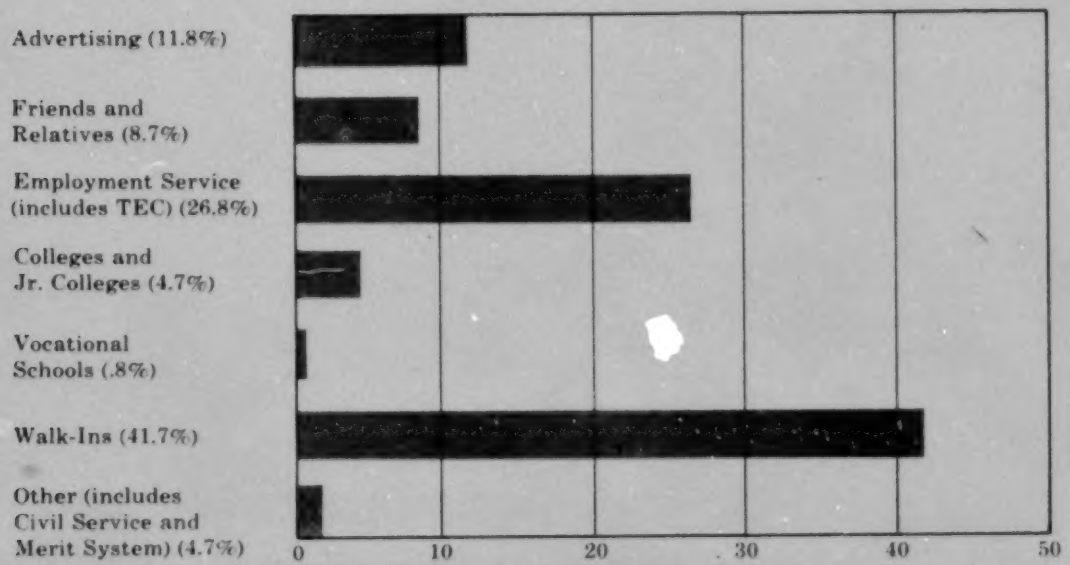
[3]For this reason, total percentage for question eight will exceed 100%.

In this area, the high school diploma appears to be the standard desired education as viewed by employers, especially when it is realized that a person possessing a high school education is mentioned 83 times alone as having the most desirable education level for employment.

Keeping in mind the minimum and desirable education levels, a question concerning previous work experience is interesting. An overwhelming majority of the employers interviewed (83.5%) required no previous work experience of new employees. Approximately one year's experience was required by 10.2% of employers while one to three year's work experience was requested by only 4.7% of the interviewees. A possible explanation for the gap in experience is the fact that 86.6% of the firms/agencies contacted provided on-the-job training for new employees.

CHART IV
Primary Source of New Employees



The overwhelming source of new employees was cited as walk-ins according to employers (41.7% of employers named this as the primary source). This in itself poses a question as to where the walk-ins received their job information. Could it have come from a friend or relative, through an advertisement, or some other source? Private employment agencies and the Texas Employment Commission accounted for 26.8% of new employees.[4] The various types of advertisements ranked third as primary sources while friends and relatives ranked fourth. Placement from colleges, junior colleges, and vocational schools ranked low in this tally. Civil service and the merit system were cited by several agencies as their only source of new employees.

Because so many of the businesses and agencies are located in the Waco Metropolitan area, a question on out-of-county employees was desirable. Only thirty-five (27.6%) respondents in the four counties had no out-of-county employees. Estimates by employers ranged from one percent to more than ten percent on employees who commuted from another county to work.

Only employees could respond to a question concerning job satisfaction, but job stability appears to be the key word for a low turnover rate in the survey area. Whether the reason is in fact job satisfaction or a narrow job market could not be ascertained from employers. Therefore, in order to solicit more information on turnover and its connection with education,

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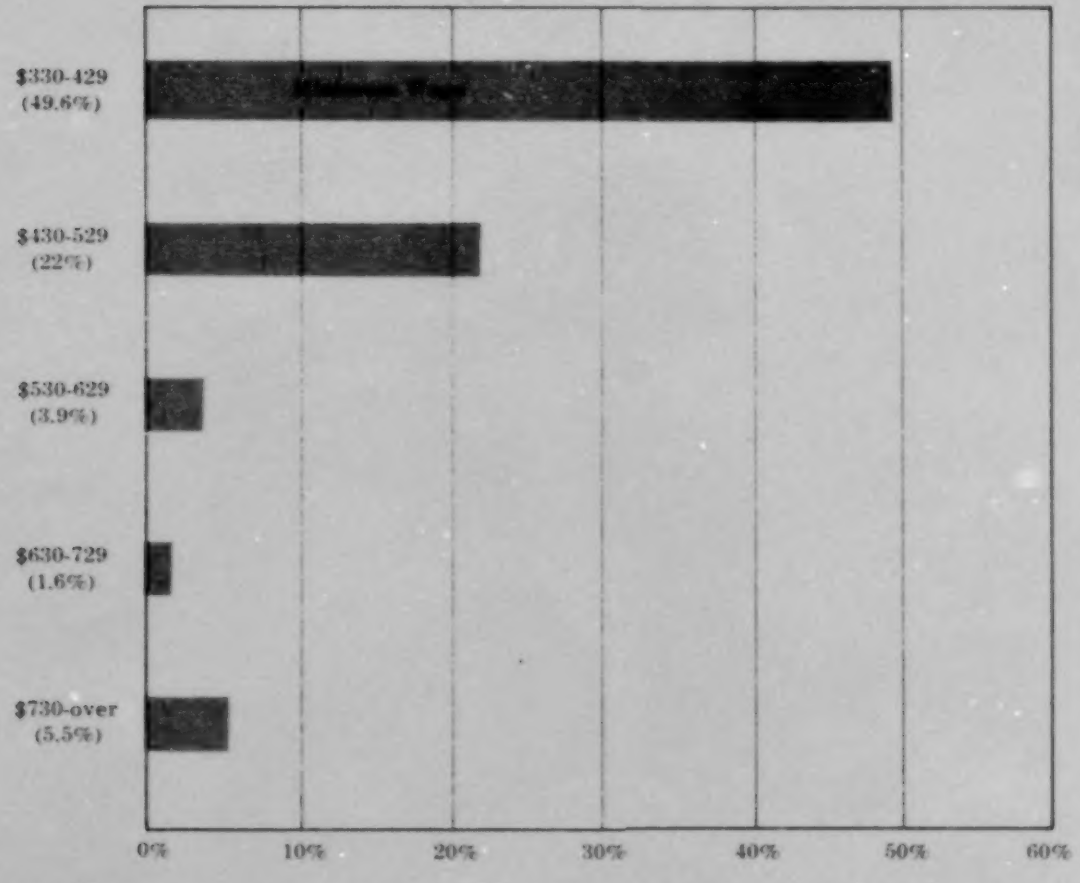
[4] In dividing this category, TEC was named twelve times as the primary source and employment agencies twenty-two times.

employers who indicated a turnover problem were asked if prior training in a certain area would alleviate the turnover in entry-level positions. A positive response was received from almost 12% of employers. Technical and crafts training was the type recommended most often by those who believed turnover would decrease with training. Twenty-nine percent were uncertain whether prior training would decrease turnover.

CHART V
Entrance Level Wage

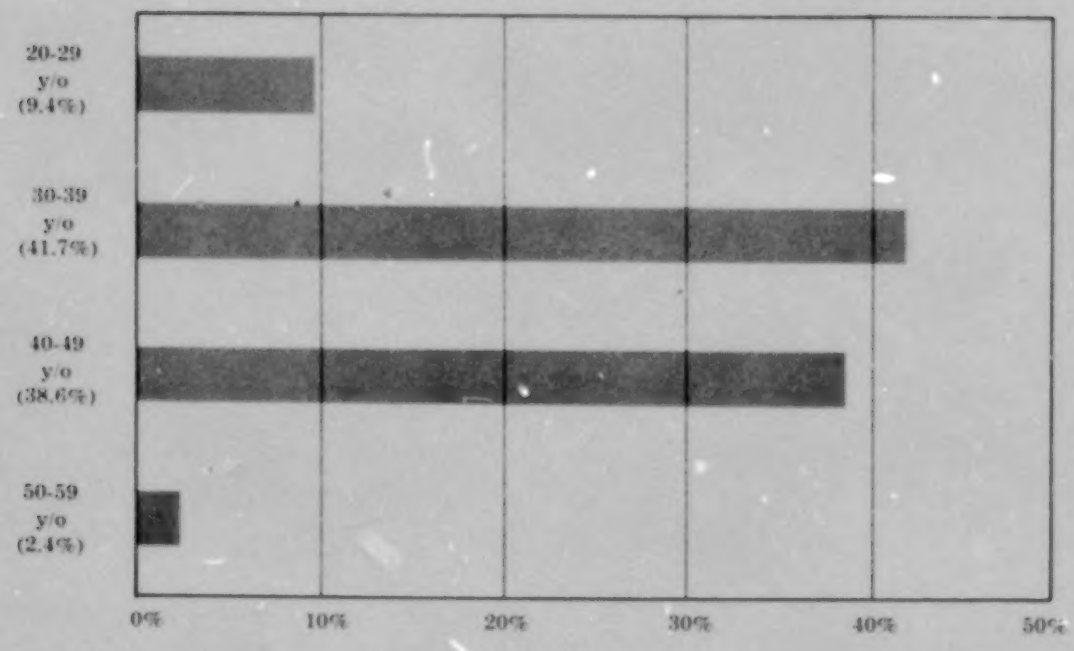


Interpretation of Chart V indicates that almost fifty percent (49.6%) of the executives and administrators interviewed considered a wage within the range of $330 - $429 as representative starting salary for a trained, new employee. This range is within minimum wage requirements. A higher salary range of $430 - $529 was named by 22% of respondents with the remaining 11% dispersed through higher entrance wages. In other words, more than 33% of employers believe a higher entrance wage to be representative of what a trained, new employee should receive. Seventeen percent of employers gave no estimate for various reasons, causing this question to have the greatest refusal rate in the survey questionnaire.

Almost sixty-five percent of the employers contacted had an employee retirement plan. The two types of plans described most often were profit sharing and/or optional retirement plans such as tax sheltered annuities, etc. Because of the interest by senior citizens groups, employers who did have a retirement plan were asked whether that plan would be made available to new employees aged fifty-five and older. Seventy percent of those employers who had a plan stated that new employees aged fifty-five and older would be eligible for their retirement program.

Employers were asked to estimate the average age of current employees (see Chart VI, p. 18). The estimate reveals the average age to be high; ages between 30-39 and 40-49 years were cited over 80% of the time.

CHART VI
Average Age of Employees



A question pertaining to missed work days due to health problems appears to have caused misunderstanding when the data is examined. The estimates do not vary greatly from "below ten percent" to "one hundred percent," but are evenly dispersed. Perhaps the confusion was due to the fact that family-related illness was not excluded in the question, leaving it open for employer interpretation. Whatever the reason, confusion is apparent, making response validity questionable.

Accessibility by public transportation was a pertinent question in the Waco metropolitan area. Almost forty-two percent of the firms were served by public transportation; more than half of these were served within walking distance.

A substantial number of businesses and agencies (22%) within the metro area were not located near a bus route. This question also carries implications for senior citizens and potential employees without private transportation.

Fifty-one percent of employers interviewed indicated no problem finding qualified employees. The remaining 49% were given an opportunity to specify the job categories which were difficult to fill.[5] The following is a rank order of frequently mentioned categories:

Technical/Mechanical	48(38.5%)
Professional	8(6.3%)
Office Skills/Secretarial	7(5.5%)
Management	4(3.2%)
Social Service	4(3.2%)
Salesmen	3(2.4%)

Simple calculations will show that the technical/mechanical field was recognized as the area in which jobs are most difficult to fill since it was named by employers twice as many times as all other categories combined.

When asked whether prospective employees should be better trained in any skill, more than a third responded that better training was not necessary. The remaining seventy percent who believed new employees should have better skill training before coming to the job expressed training needs in much the same rank order as in the above listing.

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[5]Because each employer could list more than one category, the job type percentages, when totaled, will exceed 49%.

Techncial/Mechanical	55(44.3%)
Office Skills/Secretarial	18(14.3%)
Professional	10(7.9%)
Management	8(6.4%)
Salesman	8(6.4%)
Social Service	6(4.8%)

The largest single category mentioned (not in conjunction with others) was the top ranked technical/mechanical field - 35.4%.

The previously discussed question of turnover and the lack of it is reflected in a response by eighty percent of local employers who could list no positions they were unable to fill from within their organization. "Under five positions" that could not be filled through promotion were open in each of eighteen industries and agencies. Four firms had less than 10 positions each that were open, and only one firm had more than fifteen open positions.[6] Those employers who had job openings were asked if they would be willing to help their employees meet tuition expenses for the necessary skill training. Six percent were positive on the suggestion while ten percent were negative.

An important question for curriculum planning was whether an employer would send or encourage an employee to attend a course in a necessary training area if one were taught at a convenient time and place. Fifty-seven percent would encourage the employee to enroll in the class; within the group, thirty-eight percent would agree to help with tuition expenses.

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[6]A general listing of positions open in firms contacted is found in the Appendices.

Thirteen percent of those questioned would neither lend encouragement nor help with expenses.

"After work hours" was considered the most convenient time for class from the employer's standpoint (42.5%). Nine percent had "no time preference" while four percent would have allowed class attendance during working hours.

Almost thirty percent of employer-respondents considered training programs in colleges and technical schools adequate for the competence required for their operations. A concentration of better programs in technical education locally was requested by 48.8% of employers while 6.3% believed college courses should be increased locally. Almost twelve percent (11.8%) held that a combination of the two -- technical and college courses -- should be increased in the area.

As stated previously, the majority of local industries and agencies provide on-the-job training for new employees. Over forty percent who have OJT would prefer that presently employed personnel receive formal training in a college or technical school. Satisfaction of their on-the-job training was voiced by 37.8% interviewed. Only 16.5% do not have OJT of which almost 5% desired formal training for their employees to improve job skills.

When asked about specific training courses that, if taught by a vocational school or college would benefit their firm, twenty percent replied there were none. The approximately 80% of employers who named courses were asked to list as many job categories as they felt would prove beneficial to their firm, if implemented and attended. A rank ordering of this list follows with a frequency count for number of times mentioned.

Technical/Mechanical	68
Secretarial/Office Skills	19
Business/Management	18
Engineering	9
Psychology/Interpersonal Relationships	8
Salesmanship	7
Other (includes Nursing & Law Enforcement)	5
Computer Programming	3

CHART VII
Major Problems for Employers in Hiring

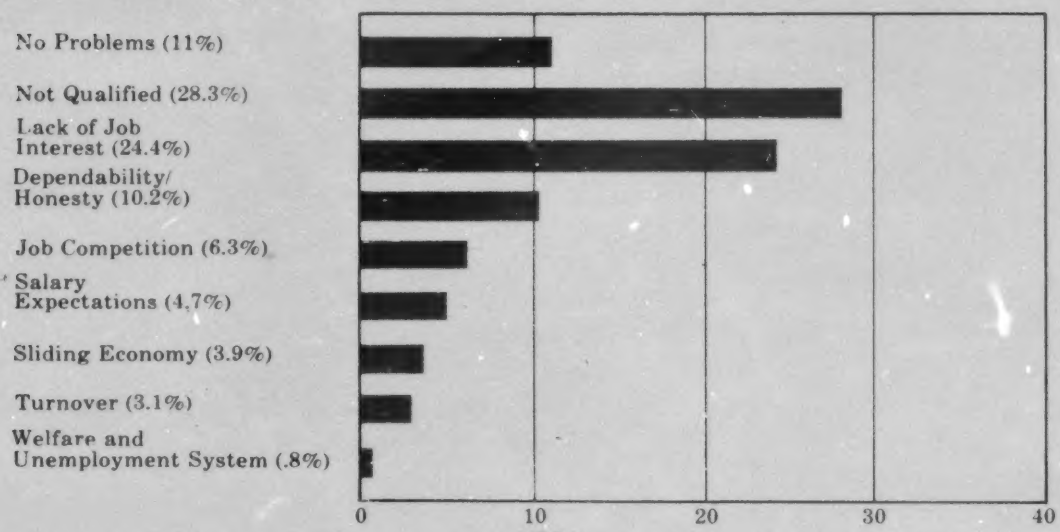
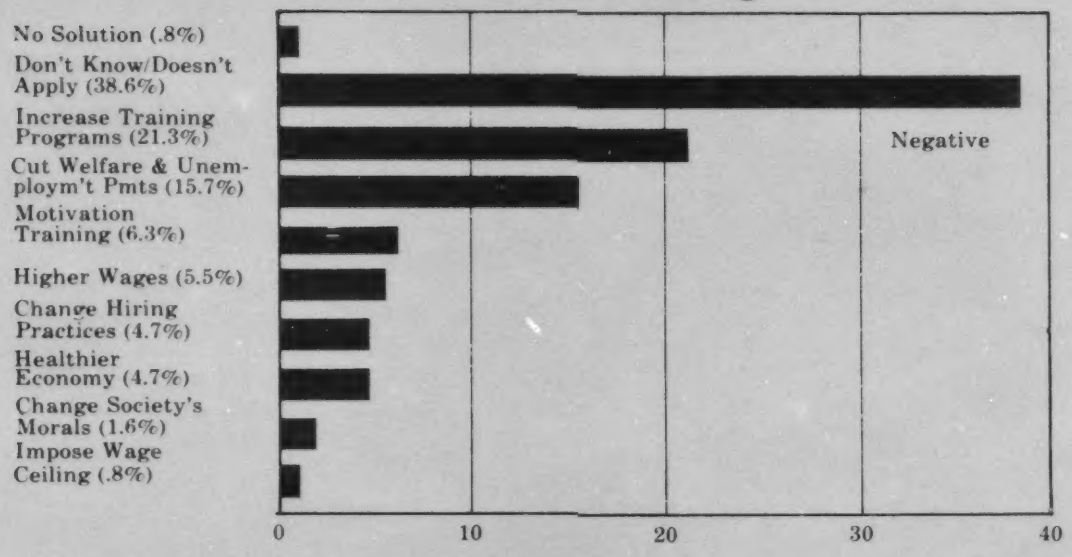


CHART VIII
Solutions to Problems in Hiring



The major problem voiced by employers in hiring new employees was a lack of job qualifications by the applicant. Poor job interest drew the second highest rating from employers. Ranking as the third problem was lack of dependability and honesty of prospective employees; job competition in the area ranked fourth.

The remainder of the problem received almost equal rating: high salary expectations, a doubtful economic picture, job turnover, and the current welfare and unemployment system.

Only 11% of local employers could summon to mind no problem encountered in hiring.

One employer foresaw no solution to problems of hiring and forty-nine employers could not identify a ready solution.

The solution to hiring problems most often cited -- an increase in pertinent training programs -- coincides with the major problem. A cut or revision of the welfare and unemployment compensation programs ranked as the second solution although it was the lowest-ranked problem.

Motivation training ranked as the third solution to the problems of hiring new employees while the need for higher wages paid to employees was rated a close fourth.

Tied for the rank of fifth solution were a healthier economy and changes of in-house hiring practices.

CHART IX
Five-Year Employment Projections

	1975	1976	1977	1978	1979
None	15	13	13	14	14
1-10	27	28	28	24	24
11-20	11	14	14	13	12
21-30	9	6	6	7	8
31-40	2	2	4	1	1
41-50	3	5	4	3	3
Over 50	13	9	8	9	9
Replacements only	27	28	28	28	28
No Estimate	20	22	22	28	28

Neither an increase or decline in employment can be projected from Chart IX. Employers seem to estimate a status quo through 1979.

After employment projections were made, employers were asked to estimate by percentages the proportion of their work force without the high school diploma or equivalent. The question asked for a percentage so that analysis between large and small businesses were comparable. Answers from businesses and agencies ranged as follows:

No employees without HSD	9
10% employees without HSD	41
20% employees without HSD	12
30% employees without HSD	9
40% employees without HSD	6
50% employees without HSD	15
Over 50% employees without HSD	13
Uncertain of employees' education	22

These figures coincide with the answers employers gave to the questions on an applicant's necessary minimum educational level where it was found that almost 90% of employers accept employees with less than a high school education or equivalent.

When asked whether they would continue to hire employees without a high school diploma, the above pattern was generally continued:

No employees without HSD	20
10% employees without HSD	42
20% employees without HSD	14
30% employees without HSD	7
40% employees without HSD	1
50% employees without HSD	23
Over 50% employees without HSD	8
Uncertain whether hire without HSD	12

Since approximately 70% of employers will continue to hire applicants without the high school diploma or equivalent, they were asked to list the special skills that they would require of these employees. Answers were ultimately grouped in six broad categories and employers could list more than one entrance skill.

Technical/Mechanical	32
Secretarial/Office Skills	11
Salesmanship	4
Social Service	4
Data Processing	2

"No special skills will be required if prospective employee has no high school diploma" was the answer most often received (40.9%). This response reflects a previous answer that no job or skill experience is required of new employees by the majority of employers.

Employers were asked to list training programs which they felt contributed to the success of their operation and its employee

Several named specific schools but in the final analysis, only the category of the program offered was listed. The categories are ranked below according to their absolute frequency by name.

On the Job Training	61
Technical/Mechanical	23
Business/Management	21
Social Service	11
Secretarial/Office Skills	9
Psychology/Interpersonal Relationships	8
Salesmanship	4
Data Processing	1

Apparently, employers esteem their on-the-job training programs as having the essentials for a good training program since 48% answered with on the job training, 39% giving this answer exclusively.

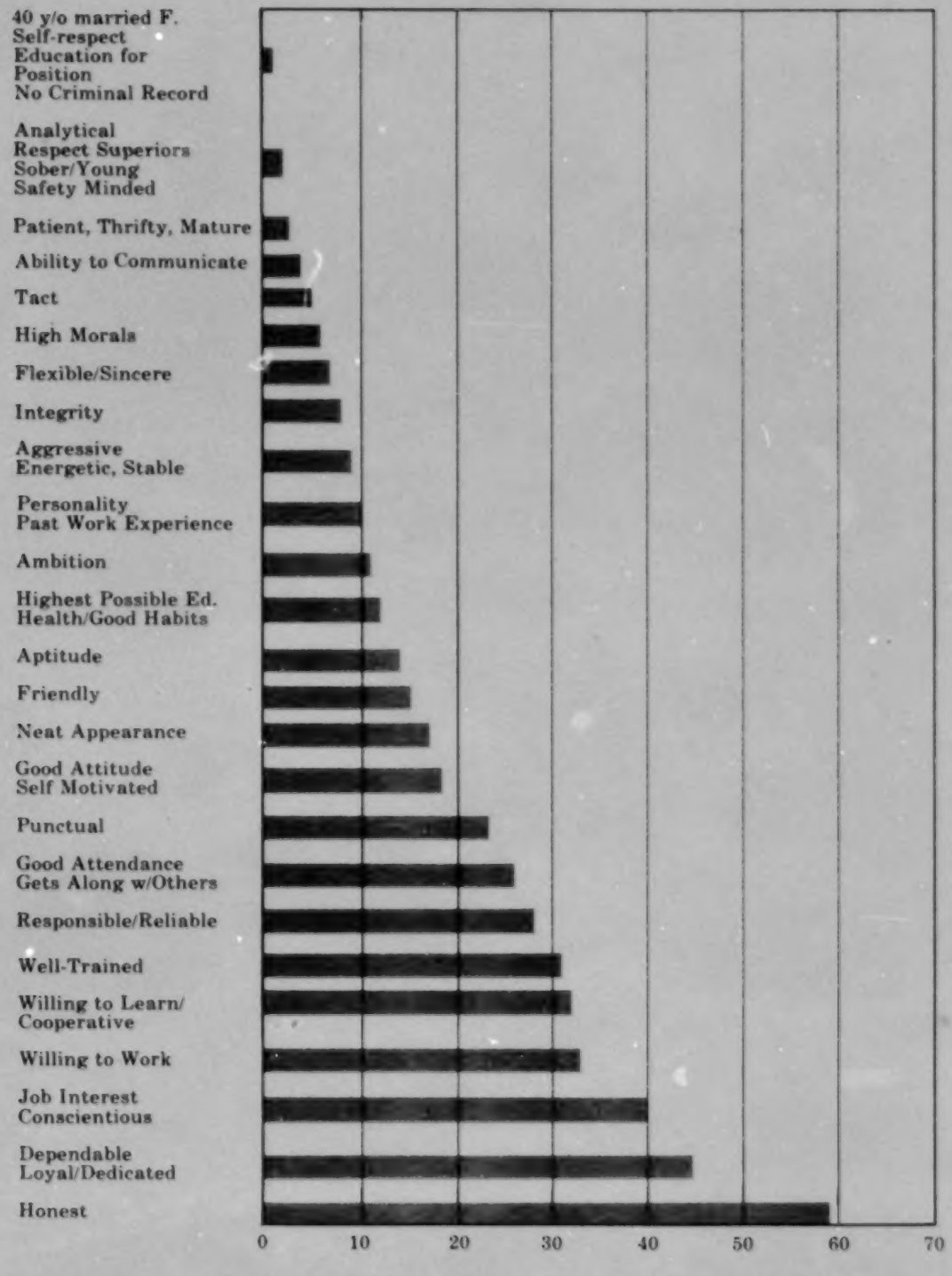
Almost three-fourths of executives and administrators interviewed felt that training by local educational institutions was adequately meeting their employee needs. The remaining twenty-five percent named skill categories in which they felt employees should be better prepared to meet employment needs. A rank order frequency again points out the need for additional technical and mechanical programs:

Technical/Mechanical	26
Social Service	4
Management	3
Salesmanship	1
Secretarial/Office Skills	1

Those executives and administrators who felt more training programs were necessary were asked the amount of training they were prepared to provide. Four percent answered they would not provide any training while eight percent said they would provide 100% of the training. Only two other categories were answered: 3% would provide 10% of necessary training and 2% would provide fifty percent of training needs.

A concluding question provided Chart X. Employers were asked to list the most important characteristics of what they considered to be a good employee. They revealed that the top four characteristics were honesty, dependability, loyalty and dedication, and job interest and conscientiousness. Close inspection of replies to this question will be useful to educators, counselors, and manpower planners when considered with the total findings of this study.

CHART X
Most Important Employee Characteristics



APPENDIX A

BUSINESSES, INDUSTRIES AND AGENCIES CONTACTED

BUSINESSES, INDUSTRIES AND AGENCIES CONTACTED

Alamo Steel & Machine Company
American Amicable Life Insurance
American Income Life
Baird's (Mrs.) Bakeries
Baylor University
Bird-Kultgen
Bosque County
Brazos Concrete Products, Incorporated
Broadmore Homes
Celtic Corporation
Central Freight Lines
Central Texas Iron Works
Centurion Homes Corporation
Certain-Teed Products Corporation
Certain-Teed Products Corporation (Piping & Plastics Group)
Certain-Teed Products Corporation (Hillsboro)
Chemical Lime, Incorporated (Clifton)
Citizen's National Bank
City of Clifton
City of Hillsboro
City of Marlin
City of Meridian
City of Waco
Connally Independent School District
Cox, R.E. Company
Crow, R.M. Company
Davis Iron Works
Double L Apparel Manufacturing Company
Dr. Pepper Bottling Company

Economic Opportunities Advancement Corporation
Fab-Knit Athletic Manufacturing Company
Falls County
Festival Homes of Texas (Hillsboro) - out of business
First National Bank
Frank Smith & Sons Company
Gammon of Dallas, Incorporated (Mart)
Gearench Manufacturing Company (Clifton)
Gibson's Discount Center
Goldstein-Migel
Goodall-Witcher Hospital (Clifton)
Graham Embrodiery
Grant-Buie Hospital (Hillsboro)
Gulf States Paper Company
Haywood Company
HEB Food Stores
Hill County
Hill Industries, Incorporated (Hillsboro)
Hill Printing
Hillcrest Hospital
Hillsboro Clinic (Hillsboro)
Huck Manufacturing
Ideal Company
Imperial Woodwork, Incorporated
Island Plastics
K-D Manufacturing Company
Kinder Manufacturing Incorporated (McGregor)
K-Mart Discount Stores
Kreditor Manufacturing Company (Hubbard)
La Vega Independent School District
Library Binding Company
L L Sams & Sons/Sams Manufacturing
Lorch-Westway Corporation (West)
Malouf Company (Hillsboro)

Marathon Battery Company
Marlin Mills, Incorporated (Marlin)
McLennan County
Methodist Home
Midway Independent School District
Model Laundry (Marlin)
Monsanto Fertilizer Company (Itasca)
Montgomery Ward
Newspapers, Incorporated
Owens-Illinois Glass Plant
Piggly Wiggly Stores
Pepsi-Cola Bottling Company
Perm-a-Dwell Corporation (McGregor)
Pure Milk Company
Rangaire Corporation (Itasca)
Rainbow Baking Company
Rainbow Garment Company
Robinson Independent School District
Robintech, Incorporated (Hillsboro)
Rocketdyne (McGregor)
Rosebud Dresses, Incorporated (Rosebud)
Round Rock Lime Company (Blum)
Safeway Stores
Sears-Roebuck Company
Seven-Up Bottling Company
Slater Food Service (ARA)
Smead Manufacturing Company (McGregor)
Smith Manufacturing Company
Southland Corporation
Southwestern Bell
Sprayberry Handbags, Incorporated (Laguna Park)
Steakley Brothers Chevrolet
Success Motivation Institute, Incorporated
Swift & Company (Marlin)

Terry Industries of Texas, Incorporated
Texas Coffin Company
Texas Concrete Works, Incorporated
Texas Construction Company (Blum)
Texas Farm Bureau
Texas Highway Department
Texas Milling Company (Clifton)
Texas State Technical Institute
Texas Power & Light
Torbet-Hutchings-Smith Hospital (Marlin)
Town Square Furniture (Hillsboro)
U. S. Post Office
Universal Atlas Cement
Van Tran Electric Corporation
Veterans Administration Hospital (Marlin)
Veterans Administration Hospital (Waco)
Veterans Administration Regional Office
Waco Apparel, Incorporated
Waco Coca-Cola Bottling Company
Waco Dress Company
Waco Independent School District
Waco State Home
Wallace Business Forms (Marlin)
Walls Industries, Incorporated (Clifton)
Warren, Lisa Manufacturing Company (Meridian)
Welfare, Department of Public
West Flour Mills, Incorporated (West)
Wilson Building Material Company (Clifton)
Winston Delaware, Incorporated, (McGregor)
Woolco Department Store

Unless specified otherwise by name or parentheses, the industries and agencies listed are located in the Waco metropolitan area.

APPENDIX B

SURVEY INSTRUMENT

BUSINESS & INDUSTRY SURVEY 11

FIRM NAME_____

ADDRESS_____

Name of Person Interviewed_____

Telephone_____Position_____

Manufacturing produce/service provided_____

_____

1. How many full-time employees were on your payroll a year ago (January, 1974)?

   _____

2. How many full-time employees are on your payroll at the present time?

   _____

3. How many part-time employees were on your payroll a year ago (January, 1974)?

   _____

4. How many part-time employees are on your payroll at the present time?

   _____

5. What is your minimum hiring age?_____

6. Do you hire only males, only females, or both?

   _____a. only males

   _____b. only females

   _____c. both

7. What is your minimum educational level (years school completed) for employees?

_____

8. What is the desirable educational level for new employees?

_____a. Professional
_____b. Some graduate school
_____c. 4-Year college graduate
_____d. 1-3 Years of College (business school, etc.)
_____e. High School Graduate
_____f. 10-11 Years of school
_____g. 7-9 Years of school
_____h. 4-6 Years of school

9. Is experience required of new employees? _____Yes _____No

If answer is yes, how many years experience is required?

_____

10. How do you obtain your employees?

_____Advertising
_____Friends and relatives
_____Employment service
_____Public schools referral
_____Colleges and Jr. Colleges
_____Vocational Tech. Schools
_____Walk-ins
_____Other (specify)_____
_____

Which of the above is your primary source?_____

11. What percent of your employees are from outside your county?_____

12a. Do you have a high rate of turnover in your entry level employees?

Yes_____ No_____

12b. If yes, do you feel that prior training in a certain field would prevent the turnover?

Yes_____ No_____

12c. What training would you recommend?

_____

13. What do you think a trained employee in your field of employment should expect as an entry level wage?

$_____per month?

14. Do you have a retirement plan for all employees?

Yes_____

No_____

If yes, explain:_____

_____

15. Will new employees age 55 and older be eligible for your retirement program?

_____Yes

_____No

If no, explain:_____

_____

16. What is the average age of your employees?_____years of age

17. In the past year, what percentage of missed work days was due to health problems?

_____%

18. Is your firm accessible by public transportation?

_____Yes

_____No

If yes, give proximity:_____

19. Does your firm have training for new employees?

Yes_____(Please list the kinds of training you have.) No_____

_____

_____

20. Does your firm have any problem finding qualified employees?

Yes_____ (What specific jobs are involved?) No_____

_____

_____

21. Would like to see your prospective employees better trained in any skill?

Yes_____ (In what specific way would you like to see them prepared?) No_____

_____

_____

22a. Do you currently have a job opening that you have been unable to fill from within your organization due to lack of training?

Yes_____ No_____

22b. If yes, how many?

_____

22c. What is the type of training required?_____

_____

22d. If yes, would you be willing to help your employees meet the tuition expense?

Yes_____ No_____

23a. Would you send or encourage one of your employees to attend a course in the training areas you mentioned above if one were taught at a convenient time and place in (city)_____?

Yes_____ No_____

23b. If Yes, what do you consider a convenient time?_____

23c. If yes, would you be willing to help your employees meet the tuition expense?

Yes_____ No_____

24. Of the technical skills and professional competence required for your operations, which need better training programs in colleges or technical schools?

_____None

_____

_____

25. Does your firm train presently employed personnel for the purpose of promoting or advancing them?

Yes_____ (What jobs are involved?) No_____

_____

_____

_____

(If the answer to the question was Yes, ask the following question.)

Would you rather have these people trained by a formal institution such as a college or technical school?

Yes_____ No_____

26. Are there specific training courses that if taught by a vocational school or college would benefit your firm?

Yes_____ (What specific courses do you have in mind?) No_____

_____

_____

_____

27a. What do you think is the major problem for businessmen in the area of hiring new employees?

_____

_____

27b. How could this problem be solved?_____

_____

_____

28. How many new employees do you plan to hire each year for the next five years?

a. '75_____
b. '76_____
c. '77_____
d. '78_____
e. '79_____

29. How many of your present employees do not have a high school diploma or equivalent?_____

30a. Do you expect to hire employees with less than a high school diploma or equivalent in the future?

_____Yes _____No

If yes, approximately what number of employees will you hire w/o high school diploma?

_____

30b. If yes, what special skills or training would you require of these employees?

_____

31. List present training programs which you feel contribute to the success of your operation and its employees:

_____

_____

32a. From your experience do you feel that the educational institutions in this area are adequately preparing prospective employees to meet your needs?

_____Yes _____No

If no, in what ways should they be better prepared?_____

_____

_____

b. If no, how much of this training would you do?_____

_____

_____

33. Would you please list the most important characteristics of what you consider to be a good employee? Be as complete as you possibly can and you are completely free in your responses!

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

APPENDIX C

CODE MANUAL

BUSINESS & INDUSTRY SURVEY

Code Manual

Interview Number 001-500

County and City

1 - Bosque	1-Clifton
	2-Meridian
	3-Laguna Park
2 - Falls	1-Marlin
	2-Rosebud
3 - Hill	1-Blum
	2-Hillsboro
	3-Hubbard
	4-Itasca
4 - McLennan	1-Mart
	2-McGregor
	3-Waco
	4-West

Manufacturing Product/Service provided

1 - Agriculture, Mining, Construction
2 - Manufacturing, soft
3 - Manufacturing, hard
4 - Transportation, Communication, Utilities
5 - Wholesale and Retail Trade
6 - Finance
7 - Medical
8 - Government

1. Employees Full-time (1974)

1 - A
2 - B
3 - C
4 - D
9 - DK/NA

2. Employees Full-time currently

1 - A
2 - B
3 - C
4 - D
9 - DK/NA

3. Part-time Employees, January, 1974

1 - yes
2 - no
9 - DK/NA

4. Part-time Employees currently

1 - yes
2 - no
9 - DK/NA

5. Minimum Hiring Age

1 - 16-18
2 - 19-25
3 - no minimum age
9 - DK/NA

6. Hire males, females or both

1 - only males
2 - only females
3 - both
9 - DK/NA

7. Minimum Educational level

1 - less than high school graduate
2 - High School graduate
3 - Associate certificate
4 - College degree
9 - DK/NA

8. Desirable educational level for new employees

1 - less than high school
2 - High School graduate
3 - Associate certificate
4 - College degree
9 - DK/NA

9. Experience required of new employees

1 - yes, approximately 1 year
2 - yes, 1-3 years
3 - no
9 - DK/NA

10. Primary source of new employees

0 - none
1 - advertising
2 - friends
3 - employment service (includes TEC)
4 - public schools' referral
5 - colleges/jr. colleges
6 - vocational/technical schools
7 - walk-ins
8 - Other (Includes civil service & Merit system
9 - DK/NA

11. Percentage of employees from outside county

1 - 0%
2 - 1-2%
3 - 3-4%
4 - 5-10%
5 - over 10%
9 - DK/NA

12a&b. Turnover in entry-level employees

1 - yes, and prior training would help decrease turnover
2 - yes, but uncertain if prior training would help decrease turnover
3 - no turnover
9 - DK/NA

12c. Type of training recommended

1 - on-the-job
2 - technical/crafts
3 - salesmanship
4 - business machines/secretarial
5 - management
6 - interpersonal relationships
9 - DK/NA

13. Entry-level wage per month (if by hour, based on 40 hour work week)

1 - $330-429
2 - $430-529
3 - $530-629
4 - $630-729
5 - $730 and over
9 - no estimate for various reasons

14. Retirement Plan

1 - yes
2 - no
9 - DK/NA

15. Eligibility of 55 year/olds for retirement plan

1 - yes
2 - no
9 - DK/NA

16. Average Age of Employees

1 - 20-29
2 - 30-39
3 - 40-49
4 - 50-59
5 - Over 60
9 - DK/NA

17. Percentage of work days missed due to health

1 - none
2 - 10% or less
3 - approximately 25%
4 - approximately 50%
5 - approximately 75%
6 - approximately 100%
9 - DK/NA

18. Firm's accessibility by public transportation

1 - yes, within a block
2 - yes, within walking distance
3 - no
4 - NA in non-metropolitan area
9 - DK/NA

19. On-the-job training for new employees

1 - yes
2 - no
9 - DK/NA

20. Problem finding qualified employees

1 - yes, office skills/secretarial
2 - yes, technical/mechanical
3 - yes, social service
4 - yes, management
5 - yes, salesmanship
6 - yes, professional
7 - no
8 - DK/NA

21. Should new employees be better trained?

1 - yes, office skills/secretarial
2 - yes, technical/mechanical
3 - yes, social service
4 - yes, management
5 - yes, salesmanship
6 - yes, professional
7 - no
9 - DK/NA

22a&b. Job opening unable to fill and number

1 - yes, less than 5
2 - yes, less than 10
3 - yes, less than 15
4 - yes, 15 or more
5 - no
9 - DK/NA

22c. Type of training required?

1 - secretarial
2 - technical
3 - mechanical
4 - professional
9 - DK/NA

22d. Employer willing to help with employee's schooling

1 - yes
2 - no
9 - DK/NA

23 a&c. Encourage employee to attend near-by class and help with tuition

1 - yes, and help with tuition
2 - yes, but not help with tuition
3 - no, and help with tuition
4 - no, and not help with tuition
9 - DK/NA

23b. Convenient time for class

1 - during work hours
2 - after work hours
3 - no preference
9 - DK/NA

24. Skills which need better training programs

1 - technical schools
2 - colleges
3 - both
4 - none
9 - DK/NA

25. In-house training to promote employees

1 - yes, and also want people trained at college/technical school
2 - yes, but rather have on-job training
3 - no, and want people trained at college/technical school
4 - no, and do not want formal training for employees
9 - DK/NA

26. Courses to benefit firm

0 - none
1 - Business/Management
2 - Secretarial/Office Skills
3 - Computer Programming
4 - Technical/Mechanical
5 - Psychology/Interpersonal Relationships
6 - Salesmanship
7 - Engineering
8 - Other (includes Nursing and Law Enforcement)
9 - DK/NA

27a. Major problem - hiring new employees

0 - no problems
1 - not qualified
2 - want too much money
3 - economy sliding
4 - welfare system
5 - dependability/honesty
6 - lack of interest on part of employee
7 - turnover
8 - competition
9 - DK/NA

27b. Solution to problem

0 - no solution
1 - more training programs
2 - wage ceiling
3 - healthier economy
4 - revise/cut welfare system
5 - change morals of society
6 - motivation training
7 - change in-house hiring practices
8 - higher wages
9 - DK/NA

28a. How many new employees in 1975?

1 - none
2 - 1-10
3 - 11-20
4 - 21-30
5 - 31-40
6 - 41-50
7 - over 50
8 - replacements only
9 - no idea/DK

28b. How many employees in 1976?

1 - none
2 - 1-10
3 - 11-20
4 - 21-30
5 - 31-40
6 - 41-50
7 - over 50
8 - replacements only
9 - no idea/DK

28c. New employees in 1977?

1 - none
2 - 1-10
3 - 11-20
4 - 21-30
5 - 31-40
6 - 41-50
7 - over 50
8 - replacements only
9 - no idea/DK

28d. New employees in 1978?

1 - none
2 - 1-10
3 - 11-20
4 - 21-30
5 - 31-40
6 - 41-50
7 - over 50
8 - replacements only
9 - no idea/DK

29e. New employees in 1979?

1 - none
2 - 1-10
3 - 11-20
4 - 21-30
5 - 31-40
6 - 41-50
7 - over 50
8 - replacements only
9 - no idea/DK

29. How many employees without High School Diploma

1 - none
2 - 10% approximately
3 - 20% approximately
4 - 30% approximately
5 - 40% approximately
6 - 50% approximately
7 - more than 50%
9 - DK/NA

30a. Expect to hire employees without High School Diploma

1 - no
2 - yes, 10% approximately
3 - yes, 20% approximately
4 - yes, 30% approximately
5 - yes, 40% approximately
6 - yes, 50% approximately
7 - yes, over 50%
9 - DK/Na

30b. Special Skills if no diploma

1 - salesmanship
2 - secretarial/office skills
3 - mechanical/technical
4 - social service
5 - data processing
6 - none
9 - DK/NA

31. Current company programs

1 - secretarial/office skills
2 - mechanical/technical
3 - management/business
4 - social service
5 - psychology/interpersonal relationships
6 - salesmanship
7 - data processing
8 - on-the-job training
9 - DK/NA

32a. Adequacy of training by educational institutions

1 - yes, educational institutions are adequately training employees
2 - no, need training in management
3 - no, need training in secretarial skills
4 - no, need training in salesmanship
5 - no, need training in technical area/mechanical area
6 - no, need training in social service
7 - no, need training in data processing
9 - DK/NA

32b. Amount of training company would do

1 - 10% (approximately)
2 - 25%
3 - 50%
4 - 75%
5 - 100%
6 - none
9 - DK/NA

33. Characteristics of good employee
(Not coded because of open-ended responses.)

APPENDIX D

TABULATED RESPONSES
TO
BUSINESS/INDUSTRY SURVEY INSTRUMENT

TABULATED RESPONSES
TO
BUSINESS/INDUSTRY SURVEY INSTRUMENT

Manufacturing Product/Service Provided
by
Business/Industry Surveyed

Agriculture, Mining, Construction	7
Manufacturing, Soft	24
Manufacturing, Hard	33
Transportation, Communication, Utilities	5
Wholesale and Retail Trade	24
Finance	2
Medical, Health, Education, Legal	19
Government	13
Total Business/Industries Surveyed	127

Question 1 - How many full-time employees were on your payroll a year ago (January, 1974)?

Full-time Employees 1974

	No. of Firms/Agencies
A. Under 50	20
B. Approximately 150	75
C. Approximately 300	19
D. Over 450	13

Question 2 - How many full-time employees are on your payroll at the present time?

Full-time Employees 1975

		No. of Firms/Agencies
A.	Under 50	26
B.	Approximately 150	68
C.	Approximately 300	22
D.	Over 450	11

Question 3 & 4 - How many part-time employees were on your payroll a year ago? How many at the present time?

Part-time Employees

	1974	1975
Yes	86	86
No	40	40

Question 5 - What is your minimum hiring age?_____

	Number	Percent
16 - 18 years old	121	95.3%
19 - 25 years old	6	4.7%

Question 6 - Do you hire only males, only females, or both?

	Number	Percent
Males Only	4	3.1%
Females Only	3	2.4%
Both	120	94.5%

Question 7 - What is your minimum educational level (years school completed) for employees?_____

	Number	Percent
Below High School Diploma	112	88.2%
High School Graduates	14	11.0%

Question 8 - What is the desirable educational level for new employees?

_____a. Professional
_____b. Some graduate school
_____c. 4-Year college graduate
_____d. 1-3 Years of college (business school, etc.)
_____e. High school graduate
_____f. 10-11 Years of school
_____g. 7-9 Years of school
_____h. 4-6 Years of school

	Number	Percent
Less than HS Graduate	9	7.1%
Less than HS; HS Graduate	2	1.6%
Less than HS; HS Grad. Assoc. certificate; college degree	3	2.4%
Less than HS Grad.; HS Grad.; college degree	2	1.6%
HS Graduate	83	65.4%
HS Grad.; Assoc. Certificate; college degree	11	8.7%
HS Grad.; college degree	7	5.5%
Associate certificate	1	.8%
DK/NA	9	7.1%

Question 9 - Is experience required of new employees?

Yes_____ No_____

If answer is yes, how many years experience is is required?_____

	Number	Percent
1 year approximately	13	10.2%
1 - 3 years	6	4.7%
No experience	106	83.5%
DK/NA	2	1.6%

Question 10 - How do you obtain your employees?

_____None are primary sources
_____Advertising
_____Friends
_____Employment service
_____Public schools referral
_____Colleges & Jr. colleges
_____Vocational tech. school
_____Walk-ins
_____Other (specify)_____

	Number	Percent
None are primary source	1	.8%
Advertising	15	11.8%
Friends and relatives	11	8.7%
Employment service	34	26.8%
Colleges/jr. colleges	6	4.7%
Vocational schools	1	.8%
Walk-ins	53	41.7%
Others (include Civil Service)	6	4.7%

Question 11 - What percent of your employees are from outside your county?_____

	Number	Percent
None	35	27.6%
1 - 2 Percent	32	25.2%
3 - 4 Percent	5	3.9%
5 - 10 Percent	31	24.4%
Over 10 Percent	19	15.0%
DK/NA	5	3.9%

Question 12a & b. - Do you have a high rate of turnover in your entry level employees?

If yes, do you feel that prior training in a certain field would prevent the turnover?

	Number	Percent
Yes, and decrease with prior training	15	11.8%
Yes, but uncertain if decrease with prior training	37	29.1%
No turnover	75	59.1%

Question 12c - What training would you recommend?

	Number	Percent
On-the-job	3	2.4%
Technical/crafts	16	12.6%
Secretarial/Business Machines	2	1.6%
Relationships/Interpersonal	2	1.6%
DK/NA	104	81.9%

Question 13 - What do you think a trained employee in your field of employment should expect as an entry level wage? $_____per month.

	Number	Percent
$330 - 429	63	49.6%
$430 - 529	28	22.0%
$530 - 629	5	3.9%
$630 - 729	2	1.6%
$730 and over	7	5.5%
No estimate for various reasons	22	17.3%

Question 14 - Do you have a retirement plan for all employees?

_____Yes

_____No

If yes, explain:_____

	Number	Percent
Yes	82	64.6%
No	45	35.4%

Question 15 - Will new employees age 55 and older be eligible for your retirement program?

_____Yes

_____No

If no, explain:_____

	Number	Percent
Yes	58	45.7%
No	21	16.5%
DK/NA	48	37.8%

Question 16 - What is the average age of your employees?
_____years of age.

	Number	Percent
20 - 29 years of age	12	9.4%
30 - 39 years of age	53	41.7%
40 - 49 years of age	49	38.6%
50 - 59 years of age	3	2.4%
DK/NA	10	7.9%

Question 17 - In the past year, what percentage of missed work days was due to health problems?_____%

	Number	Percent
None	1	.8%
Below 10 percent	44	34.6%
25 Percent	6	4.7%
50 Percent	17	13.4%
75 Percent	27	21.3%
100 Percent	21	16.5%
DK/NA	11	8.7%

Question 18 - Is your firm accessible by public transportation?

_____Yes

_____No

If yes, give proximity: _____

	Number	Percent
Yes, approximately 1 block	34	26.8%
Yes, walking distance	19	15.0%
No, but plant is in Metro Area	28	22.0%
Plant not in Metro Area	46	36.2%

Question 19 - Does your firm have training for new employees?

Yes____ (Please list the kinds of training you have.) No_____

_____

_____

	Number	Percent
Yes	110	86.6%
No	14	11.0%
DK/NA	3	2.4%

Question 20 - Does your firm have any problem finding qualified employees?

Yes_____ (What specific jobs are involved?) No_____

_____

_____

	Number	Percent
Office Skills/Secretarial	4	3.1%
Office Skills/Sec. Technical	2	1.6%
Office Skills/Sec.; Social Service/Management	1	.8%
Technical/Mechanical	39	30.7%
Technical/Mechanical; Social Service	1	.8%
Technical/Mechanical; Social Service; Professional	1	.8%
Technical/Mechanical; Management	2	1.6%
Technical/Mechanical; Salesmanship	2	1.6%
Technical/Mechanical; Professional	1	.8%
Social Service	1	.8%
Management	1	.8%
Salesmanship	1	.8%
Professional	6	4.7%
No problem finding employees	65	51.2%

Question 21 - Would you like to see your prospective employees better trained in any skill?

Yes_____ (In what specific way would you like to see them prepared?) No_____

_____

_____

	Percent	Number
Office Skills/Secretarial	10	7.9%
Office Skills/Secretarial; Technical	2	1.6%
Office Skills/Secretarial; Technical; Social Service; Management	1	.8%
Office Skills/Secretarial; Technical; Management	2	1.6%
Office Skills/Secretarial; Social Service; Professional	1	.8%
Office Skills/Secretarial; Management	2	1.6%
Technical/Mechanical	45	35.4%
Technical/Mechanical; Social Service	1	.8%
Technical/Mechanical; Management	1	.8%
Technical/Mechanical; Salesmanship	3	2.4%
Social Service	3	2.4%
Management	1	.8%
Management; Salesmanship	1	.8%
Salesmanship	4	3.2%
Professional	9	7.1%
Better training not necessary	39	30.7%
DK/NA	2	1.6%

Question 22a & b - Do you currently have a job opening that you have been unable to fill from within your organization due to lack of training?

Yes_____ No_____

If yes, how many?_____

	Number	Percent
Yes, under 5 positions	18	14.2%
Yes, under 10 positions	4	3.1%
Yes, more than 15 positions	104	81.9%

Question 22c. - What is the type of training required?_____

_____

	Number	Percent
Secretarial	2	1.6%
Technical	3	2.4%
Technical; Mechanical	3	2.4%
Technical; Mechanical; Professional	2	1.6%
Technical; Professional	1	.8%
Mechanical	3	2.4%
Mechanical; Professional	1	.8%
Professional	7	5.5%
DK/NA	105	82.7%

Question 22d - If yes, would you be willing to help your employees meet the tuition expense?

Yes_____ No_____

	Number	Percent
Yes	8	6.3%
No	13	10.2%
DK/NA	106	83.5%

Question 23a & c - Would you send or encourage one of your employees to attend a course in the training areas you mentioned above if one were taught at a convenient time and place here in (city)_____? Yes_____ No_____

If yes, would you be willing to help your employees meet the tuition expense?

Yes_____ No_____

	Number	Percent
Yes, help with tuition	48	37.8%
Yes, and not help tuition	24	18.9%
No, and not help tuition	17	13.4%
DK/NA	38	29.9%

Question 23b. - If yes, what do you consider a convenient time?

	Number	Percent
During work hours	5	3.9%
After work hours	54	42.5%
No preference	11	8.7%
DK/NA	57	44.9%

Question 24 - Of the technical skills and professional competence required for your operations, which need better training programs in colleges or technical schools?

_____ None_____

_____

_____

	Number	Percent
Technical courses	62	48.8%
College courses	8	6.3%
Both Technical and college	15	11.8%
None	38	29.9%
DK/NA	4	3.1%

Question 25 - Does your firm train presently employed personnel for the purpose of promoting or advancing them?

Yes_____ (What jobs are involved?) No_____

_____

_____

_____

If yes, would you rather have these people trained by a formal institution such as a college or technical school?

	Number	Percent
Yes, and trained in schools	51	40.2%
Yes, and prefer on-the-job training	48	37.8%
No, and prefer trained in schools	6	4.7%
No, and no training in schools	15	11.8%
DK/NA	7	5.5%

Question 26 - Are there specific training courses that if taught by a vocational school or college would benefit your firm?

Yes_____ (What specific courses do you have in mind?) No_____

_____

	Number	Percent
None	26	20.5%
Business/Management	4	3.1%
Business/Management; Secretarial/Office Skills	2	1.6%
Business/Management; Secretarial/Office; Computer Programming; Technical	1	.8%
Business/Management; Secretarial/Office; Technical	1	.8%
Business/Management; Secretarial/Office; Technical; Psychology/Interpersonal Relationship	1	.8%
Business/Management; Technical/Mechanical	3	2.4%
Business/Management; Technical; Salesmanship	2	1.6%
Business/Management; Technical; Salesmanship; Other	1	.8%
Business/Management; Psychology;Interpersonal Relationship; Salesmanship	2	1.6%
Business/Management; Other	1	.8%
Secretarial/Office Skills	5	3.9%
Secretarial/Office; Computer Programming	1	.8%
Secretarial/Office; Technical/Mechanical	4	3.1%
Secretarial/Office; Technical/Mechanical; Psychology/Interpersonal Relationship	1	.8%
Secretarial/Office; Psychology/Interpersonal Relationship	2	1.6%
Secretarial/Office; Salesmanship	1	.8%
Computer Programming	1	.8%
Technical/Mechanical	41	32.3%
Technical/Mechanical/Psychology/ Interpersonal Relationship	2	1.6%
Technical/Mechanical; Salesmanship; Engineering	1	.8%
Technical/Mechanical; Engineering	7	5.5%
Technical/Mechanical; Other (includes Nursing & Law Enforcement	3	2.4%

Question 27a - Which do you think is the major problem for businessmen in the area of hiring new employees?

_____

_____

	Number	Percent
No Problems	14	11.0%
Not qualified	36	28.3%
Salary (Expect too much)	6	4.7%
Economy Sliding	5	3.9%
Welfare system	1	.8%
Dependability-Honesty	13	10.2%
Lack of interest by employee	31	24.4%
Turnover	4	3.1%
Competition	8	6.3%
DK/NA	9	7.1%

Question 27b - How could this problem be solved?_____

_____

_____

	Number	Percent
No solution	1	.8%
Train program increase	27	21.3%
Wage ceiling needed	1	.8%
Economy healthier	6	4.7%
Welfare	20	15.7%
Change Society/Morals	2	1.6%
Motivation	8	6.3%
Change hire practices in-house	6	4.7%
Higher wages	7	5.5%
DK/NA	49	38.6%

Question 28a. - How many new employees do you plan to hire each year for the next five years?

'75_____

	Number	Percent
None	15	11.8%
1 - 10 employees	27	21.3%
11 - 20 employees	11	8.7%
31 - 30 employees	9	7.1%
31 - 40 employees	2	1.6%
41 - 50 employees	3	2.4%
Over 50 employees	13	10.2%
Replacements only	27	21.3%
DK/NA	20	15.7%

Question 28b. - How many new employees do you plan to hire each year for the next five years?

'76_____

	Number	Percent
None	13	10.2%
1 - 10 employees	28	22.0%
11 - 20 employees	14	11.0%
21 - 30 employees	6	4.7%
31 - 40 employees	2	1.6%
41 - 50 employees	5	3.9%
Over 50 employees	9	7.1%
Replacements only	28	22.0%
DK/NA	22	17.3%

Question 28c. - How many new employees do you plan to hire for the next five years?

'77_____

	Number	Percent
None	13	10.2%
1 - 10 employees	28	22.0%
11 - 20 employees	14	11.0%
21 - 30 employees	6	4.7%
31 - 40 employees	4	3.1%
41 - 50 employees	4	3.1%
Over 50 employees	8	6.3%
Replacements only	28	22.0%
DK/NA	22	17.3%

Question 28d. - How many new employees do you plan to hire each year for the next five years?

'78_____

	Number	Percent
None	14	11.0%
1 - 10 employees	24	18.9%
11 - 20 employees	13	10.2%
21 - 30 employees	7	5.5%
31 - 40 employees	1	.8%
41 - 50 employees	3	2.4%
Over 50 employees	9	7.1%
Replacements only	28	22.0%
DK/NA	28	22.0%

Question 28e. - How many new employees do you plan to hire each year for the next five years?
'79_____

	Number	Percent
None	14	11.0%
1 - 10 employees	24	18.9%
11 - 20 employees	12	9.4%
21 - 30 employees	8	6.3%
31 - 40 employees	1	.8%
41 - 50 employees	3	2.4%
Over 50 employees	9	7.1%
Replacements only	28	22.0%
DK/NA	28	22.0%

Question 29 - How many of your present employees do not have a high school diploma or equivalent?_____

	Number	Percent
None	9	7.1%
Yes, 10 percent	41	32.3%
Yes, 20 percent	12	9.4%
Yes, 30 percent	9	7.1%
Yes, 40 percent	6	4.7%
Yes, 50 percent	15	11.8%
Yes, over 50 percent	13	10.2%
DK/NA	22	17.3%

Question 30 - Do you expect to hire employees with less than a high school diploma or equivalent in the future?
_____yes _____no

	Number	Percent
No	20	15.7%
Yes, 10 percent	42	33.1%
Yes, 20 percent	14	11.0%
Yes, 30 percent	7	5.5%
Yes, 40 percent	1	.8%
Yes, 50 percent	23	18.1%
Yes, over 50 percent	8	6.3%
DK/NA	12	9.4%

Question 30b. - If yes, what special skills or training would you require of these employees?

	Number	Percent
Salesmanship; Secretarial/Office Skills; Technical	3	2.4%
Salesmanship; Mechanical/Techncial	1	.8%
Secretarial/Office Skills	3	2.4%
Secretarial/Office Skills; Social Service	1	.8%
Secretarial/Office Skills; Mechanical/ Technical	2	1.6%
Secretarial/Office Skills; Technical; Data Processing	1	.8%
Secretarial/Office Skills; Social Service	1	.8%
Mechanical/Technical	24	18.9%
Mechanical/Techncial; Data Processing	1	.8%
Social Service	2	1.6%
None	52	40.9
DK/NA	36	28.3

Question 31 - List present training programs which you feel contribute to the success of your operation and its employees:

	Number	Percent
None	1	.8%
Secretarial/Office Skills	1	.8%
Secretarial/Office Skills; Mechanical Technical	3	2.4%
Secretarial/Office Skills; Technical; Management/Business	1	.8%
Secretarial/Office Skills; Technical; Salesmanship	1	.8%
Secretarial/Office Skills; Management/Business; Psychology/Interpersonal Relationship	1	.8%
Secretarial/Office Skills; Social Service	1	.8%
Secretarial/Office Skills; On-the-job Training	1	.8%
Mechanical/Technical	6	4.7%
Mechanical/Technical; Management/Business	2	1.6%
Mechanical/Technical; Management/Business; On-the-job Training	2	1.6%
Mechanical/Technical; Social Service	2	1.6%
Mechanical/Technical; On-the-job Training	6	4.7%
Management/Business	7	5.5%
Management/Business; Social Service	1	.8%
Management/Business; Social Service; Psychology/ Interpersonal Relationship	1	.8%
Management/Business; Social Service; Data Proc.	1	.8%
Management/Business; Psychology/Interpersonal Relationship	1	.8%
Management/Business; Psychology/Interpersonal Relationship; Salesmanship	1	.8%
Management/Business; Salesmanship	1	.8%
Management/Business; On-the-job Training	2	1.6%
Social Service	5	3.9%
Social Service; Psychology/Interpersonal Relationship	1	.8%
Psychology/Interpersonal Relationship	2	1.6%
Psychology/Interpersonal Relationship; On-the-job Training	1	.8%
Salesmanship	1	.8%
On-the-job Training	49	38.6%
DK/NA	25	9.7%

Question 32a. - From your experiences do you feel that the educational institutions in this area are adequately preparing prospective employees to meet your needs?

Yes_____ No_____

If no, in what ways should they be better prepared?_____

_____

	Number	Percent
Yes, educational institution train employees	94	74.0%
No, need training in Management	1	.8%
No, need training in Management, Social Service; Technical	1	.8%
No, need training in Management, Salesmanship	1	.8%
No, need training in Secretarial Skills; Technical	1	.8%
No, need training in Technical/Mechanical area	23	18.1%
No, need training in Technical/Mechanical area; Social Service	1	.8%
No, need training in Social Service	2	1.6%
DK/NA	3	2.4%

Question 32b. - If no, how much of this training would you do? _____

_____

	Number	Percent
10 percent	4	3.1%
50 percent	2	1.6%
100 percent	10	7.9%
None	5	3.9%
DK/NA	106	83.5%

Question 33 - Would you please list the most important characteristics of what you consider to be a good employee? Be as complete as you possibly can and you are complete free in your responses!

MOST IMPORTANT CHARACTERISTICS OF GOOD EMPLOYEE

Honesty	59
Dependability, Loyalty/Dedication	45
Job Interest/Conscientious	40
Willing to Work	33
Willing to Learn/Cooperative	32
Well-Trained	31
Responsible/Reliable	28
Attendance, Ability to Get Along With Others	26
Punctual	23
Good Attitude, Self Motivated/Initiative	18
Neat Appearance	17
Friendly	15
Aptitude	14
Highest Educational Attainable/Good Health	12
Ambition	11
Personality, Past Work Experience	10
Energetic, Stability, Aggressive	9
Integrity	8
Flexible, Sincere	7
High Morals	6
Tactful	5
Ability to Communicate	4
Mature, Patient, Conservative/Thrifty	3
Respect for Superiors, Analytical, Sober, Safety-Minded, Young	2
Self-Respect, Minimum Educational Level for Position, No Police Driving Record, Married Woman - 40 yrs. Old	1

APPENDIX E

LISTING OF JOB OPENINGS
CURRENT
AS OF JANUARY - FEBRUARY, 1975

UNCLASSIFIED LISTING OF JOB OPENINGS
IN
BOSQUE, FALLS, HILL and McLENNAN COUNTIES
January - February, 1975

Number	Job Description
2	Accounting
5	Foreman/Supervisors
3	Printers/Pressmen
1	Production Machine Operator
1	Laborer
1	Boiler Operator
8	Salesmen
1	Concrete Technician
1	Maintenance Trainee
1	Truck Maintenance
6	Truck & Semi Drivers
5	Mechanics
4	RN's
3	LVN's
2	Lab Technicians
7	Power Sewing Machine Operators
1	Machine Mechanics
1	Power Embroidery Operator
3	Draftsmen
1	Estimator
6	Welding
2	Vending Machines
2	Bottling Production
1	Telephone Communications
1	Engineers
4	Business Management
1	Butcher Trainee
1	Real Estate
1	General Management

Number	Job Description
1	Doctor
1	BiLingual Teacher
2	Special Education Teachers
1	Custodian
1	Bus Driver
1	Small Appliance Repair
4	Air Conditioning/Heating
1	Plumber
1	Chemist
1	Book Binder
1	Computer Programmer
1	Steel Estimator
1	Structural Lay-Out
1	Steel Detailer
1	Blueprint Reader
1	Milk Processing
1	Meat Cutter
1	Locksmith
6	Secretaries
4	Electronics Skills
2	Public Relations
2	Office Machines Useage
3	Electrical Maintenance
1	Woodworking Machine Operator
1	Window Glazer
1	Editorial Writer
2	Construction Trainee
2	Painters
2	Tailors
1	Warehouseman
1	Keypunch
1	Water & Sewer Man
1	Baker/Cook
1	Cutter
1	Pattern Maker
1	Grader

Number	Job Description
1	Law Enforcement
1	Physical Therapist
1	Inhalation Therapist
1	Diesel Mechanic
3	Millworkers
1	Graphic Artist
1	Mattress Builder
1	Anesthetist
1	Pharmacist
1	Child Care MA & Ph.D.
1	Auditor
2	Tool & Die Makers
1	Machine Shop Operators
1	Electric Controller
1	Die Cutting
1	Upholstery
1	Plastic Molder